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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/776,760      | 02/10/2004  | Sandeep Bhatia       | 14328US02           | 3474             |

23446 7590 08/25/2006

MCANDREWS HELD & MALLOY, LTD  
500 WEST MADISON STREET  
SUITE 3400  
CHICAGO, IL 60661

| EXAMINER |
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NGUYEN, THAN VINH

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2187

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/776,760             |  | BHATIA, SANDEEP     |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Than Nguyen            |  | 2187                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-14 are pending.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: Applicant should remove the unnecessary paragraphs and headings (paragraphs 2-3), on page 1 of the specification. These paragraphs provide no additional information for the invention and are not required.

Appropriate correction is required.

#### ***Oath/Declaration***

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
It does not identify the citizenship of each inventor.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3,11 recite the limitation "the address decode logic" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.
6. Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention. Claims 7-8 are currently dependent upon claim 5. It appears that these claims should be dependent upon claim 6 (a method claim), instead of claim 5 (an apparatus claim).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kranich (US 5,761,443).

As to claim 1,6,9:

9. Kranich teaches the claimed processor subsystem, and is method of operation, for transacting data, the processor subsystem comprising: a processor (master device; 104/112; Fig. 1), a memory for storing data (master or slave devices 104,406,112,114; Fig. 1; 1/58-2/22; 3/30-53), the memory mapped to a first address space associated with data values with a first length and a second address space associated with data values with a second length (each have different sized bus width; 1/58-2/22; 3/30-53); and a bridge (bus conversion bridge 108; Fig. 1) for performing one transaction after receiving a transaction with an address corresponding to the first address space and for performing two or more transactions after receiving a transaction with the address corresponding to the second address space (adapting access of devices with different bus/word width; 1/58-2/22;3/30-53).

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As to claim 2,10:

10. Kranich teaches wherein the bridge further comprises: address control logic for causing the bridge to perform one transaction after receiving a transaction with an address corresponding to the first address space and perform two or more transactions after receiving a transaction with the address corresponding to the second address space (16-bit access requires 1 transaction while 32-bit access are split into 2 transactions; 1/58-2/22; 3/54-4/4; 6/25-60).

As to claim 3,7,11:

11. Kranich teaches the address decode logic comprises: a first logic circuit for decoding the address (decoder 402,404); and a second logic circuit for determining if address corresponds to the first address space or the second address space (determine if access is toward different space (different bus); 6/25-60).

As to claim 4,8,12:

12. Kranich teaches wherein the second logic circuit determines whether the address corresponds to the first address space or the second address space by examining a particular bit in the address (detect size, byte enable bits; 5/5-27).

As to claim 5,13:

13. Kranich teaches the first length is 16 bits and the second length is 32 bits (1/59-2/22, 3/54-4/4).

As to claim 14:


14. Kranich teaches a bus for transmitting the transaction from the processor to the processor subsystem (PCI bus 102; Fig. 1).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Than Nguyen whose telephone number is 571-272-4198. The examiner can normally be reached on 8am-3pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Than Nguyen  
Primary Examiner  
Art Unit 2187